



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,968	09/26/2005	Wei Sun	46528-5047	6096
23973 7590 05/06/2008 DRINKER BIDDLE & REATH ATTN: INTELLECTUAL PROPERTY GROUP ONE LOGAN SQUARE 18TH AND CHERRY STREETS PHILADELPHIA, PA 19103-6996				
EXAMINER				
JONES, HUGH M				
ART UNIT		PAPER NUMBER		
2128				
MAIL DATE		DELIVERY MODE		
05/06/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### DETAILED ACTION

1. Claims 1-11 of US Application 10/445,695, filed 5/27/2003, are pending.

### *Response to Amendment*

2. The reply filed on 12/17/2007 is not fully responsive because it fails to include a complete or accurate record of the substance of the 11/13/2007 interview. Applicant's comments (top, page 4, remarks) are noted but not understood. Applicants are required to provide their own independent copy of the interview summary.
3. The Examiner carefully prepared and reviewed Applicant's Information Disclosure Statements prior to the interview. The Examiner clearly conveyed to Applicants, during the interview, that the claims would be subject to 103 rejections, based upon the submitted references. The Examiner went to great effort to assist Applicants, including conducting multiple email communications and phone interviews. Applicants are requested to consult their notes.
4. In one example, the following (The references were discussed in detail during the interview) was provided to Applicants verbatim on 11/27/2007.

- "1) Not comfortable with the use of "optional" in the claims.
- 2) claims need to take into account teachings of (IDS)
  - solid freeform fabrication of organic-inorganic hybrid material (see calvert)
  - pg. 25 of landers et al. (desktop manufacturing...)
  - pg. 4447 (col. 1) of landers et al. (rapid prototyping...)"

In response, Applicants provided the following, verbatim, to the Examiner on 11/27/2007:

- "1) the term "optional" is removed to make a dependent claim 11.

Art Unit: 2128

2) Many proteins undergo denaturation when heated over 50-60 degrees Celsius, therefore procedures described by Calvert are not compatible with simultaneous deposition of cells since they teach depositing materials are their melting temperatures (e.g., Calvert :60 degrees C, p169, section 2.3).

I will get back to you on Landers references tomorrow morning after I get inventors input.

It appears that these references do not describe how to deposit cells in any of the given examples and seed the constructs with cells after the constructs have been made; the references just discuss possibilities without details. The inventors describe mimicking a body part by precise spatial positioning and ratio. I highlighted the parts of claim 1 and 10 which I believe distinguish from the cited art. What are your thoughts?  
Thank you!"

5. Since the above mentioned reply appears to be *bona fide*, applicant is given a TIME PERIOD of **ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME LIMIT MAY BE GRANTED UNDER 37 CFR 1.136(a).

**6. Any inquiry concerning this communication or earlier communications from the examiner should be:**

directed to: Dr. Hugh Jones telephone number (571) 272-3781,

Monday-Thursday 0830 to 0700 ET,

**or**

the examiner's supervisor, Kamini Shah, telephone number (571) 272-2279.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, telephone number (703) 305-3900.

**mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Art Unit: 2128

**or faxed to:**

(703) 308-9051 (for formal communications intended for entry)

**or** (703) 308-1396 (for informal or draft communications, please label *PROPOSED* or *DRAFT*).

/Hugh Jones/

Primary Examiner, Art Unit 2128

March 16, 2008